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NOTICE OF ALLOWANCE AND FEE(S) DUE

52989

7590

01/20/2011

Dickinson Wright PLLC
James E. Ledbetter, Esq.
International Square
1875 Eye Street, N.W., Suite 1200
Washington, DC 20006

EXAMINER

MERED, HABTE

ART UNIT

PAPER NUMBER

2474

DATE MAILED: 01/20/2011

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,671	11/14/2006	Joachim Lohr	L7725,06114	8182

TITLE OF INVENTION: QUALITY-OF-SERVICE (QOS)-AWARE SCHEDULING FOR UPLINK TRANSMISSION ON DEDICATED CHANNELS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	04/20/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS** FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

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III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

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52989 7590 01/20/2011
 Dickinson Wright PLLC
 James E. Ledbetter, Esq.
 International Square
 1875 Eye Street, N.W., Suite 1200
 Washington, DC 20006

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I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/583,671 11/14/2006

Joachim Lohr

L7725.06114

8182

TITLE OF INVENTION: QUALITY-OF-SERVICE (QOS)-AWARE SCHEDULING FOR UPLINK TRANSMISSION ON DEDICATED CHANNELS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	04/20/2011

EXAMINER	ART UNIT	CLASS-SUBCLASS
MERED, HABTE	2474	370-329000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a **Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____
 (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____
 3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY AND STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
☐ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____
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This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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1875 Eye Street, N.W., Suite 1200
Washington, DC 20006

2474
DATE MAILED: 01/20/2011

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability**Application No.**

10/583,671

Examiner

HABTE MERED

Applicant(s)

LOHR ET AL.

Art Unit

2474

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/08/2010.
2. ☒ The allowed claim(s) is/are 79, 81, 83-93, 95-100, 102, 104-105, 107-113, 118, 120-125, and 127-129 (renumbered 1-39).
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

/Aung S. Moe/
Supervisory Patent Examiner, Art Unit 2474

DETAILED ACTION

Response to Amendment

1. The amendment filed on 11/08/2010 has been entered and fully considered.
2. Claims 79, 81-93, 95-100, and 102-105, 107-113, 118,120-125, and 127-129 are currently pending. Claims 79, 100, and 118 are the base independent claims.
3. Claims 118, 128 and 129 have been amended to overcome the 35 USC 101 rejections made in the last Office Action.

Response to Arguments

4. Applicant's arguments, see Remarks filed on 11/08/2010, with respect to Claims 79, 81-93, 95-100, and 102-105, 107-113, 118,120-125, and 127-129 have been fully considered and are persuasive in conjunction with the amendments to the claims as shown below in the Examiner's Amendment. The rejection of claims 79, 81-93, 95-100, and 102-105, 107-113, 118,120-125, and 127-129 under U.S.C. 103(a) has been withdrawn.

EXAMINER'S AMENDMENT

5. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with James E. Ledbetter (28, 732) on January 3, 2011 and January 7, 2011.

The application has been amended as follows:

The following listing of claims replaces all previous versions listing of claims in the Application:

1-78. (Cancelled).

79. (Currently Amended) A method for scheduling transmissions of a mobile terminal in the UMTS (Universal Mobile Telecommunications System), the method comprising:

receiving at the base station from a radio network controller Quality of Service (QoS) attributes of a plurality of MAC-d flows to be multiplexed on a MAC-e flow onto a single enhanced dedicated uplink channel (E-DCH) by the mobile terminal,

receiving a scheduling request from the mobile terminal at the base station, wherein the scheduling request (i) comprises an identifier identifying one MAC-d flow of the plurality of MAC-d flows and (ii) requests allocation of an uplink resource to the mobile terminal for transmitting data of said plurality of MAC-d flows to be multiplexed onto the dedicated uplink channel,

determining at the base station, based on the identifier within the scheduling request received from the mobile terminal and the QoS attributes received from the radio network controller, the QoS attributes associated with the one MAC-d flow identified by the identifier within the scheduling request by associating the identifier with the QoS attributes of the plurality of MAC-d flows received from the radio network controller, and

scheduling by the base station the uplink resource for transmission of data of said plurality of MAC-d flows to be multiplexed onto the dedicated uplink channel by said mobile terminal, based on the identifier identifying said one MAC-d flow of said plurality of MAC-d flows and said QoS attributes that are determined by said determining operation and that are associated with the one MAC-d flow identified by the identifier within the scheduling request.

80. (Canceled).

81. (Currently Amended) The method according to claim 79, wherein each MAC-d flow of said plurality of MAC-d flows has a priority.

82. (Canceled).

83. (Currently Amended) The method according to claim 79, wherein the QoS attributes of a respective MAC-d flow of said plurality of MAC-d flows comprise a transmission mode associated with the data of the MAC-d flow.

84. (Currently Amended) The method according to claim 83, wherein the transmission mode indicates whether data of a respective MAC-d flow of said plurality of MAC-d flows is to be transmitted applying an additional gain factor.

85. (Previously Presented) The method according to claim 79, wherein the scheduling request further comprises information on a buffer occupancy at the mobile terminal and on a transmission power at the mobile terminal.

86. (Previously Presented) The method according to claim 79, wherein the scheduling request received by the base station is transmitted via Medium Access Control (MAC) control signaling.

87. (Currently Amended) The method according to claim 79, wherein scheduling by the base station comprises transmitting a scheduling assignment from the base station to the mobile terminal, wherein the scheduling assignment indicates the uplink resource allocated to the mobile terminal for transmission of the data of said plurality of MAC-d flows to be multiplexed onto the dedicated uplink channel by said mobile terminal.

88. (Previously Presented) The method according to claim 79, wherein the QoS attributes are received from a network element terminating the radio resource control signaling of the mobile terminal.

89. (Previously Presented) The method according to claim 88, wherein the QoS attributes are included in a configuration message.

90. (Previously Presented) The method according to claim 88, wherein the QoS attributes are received by the base station from the radio network controller in a radio link setup message or a radio link reconfiguration message.

91. (Previously Presented) The method according to claim 88, wherein the QoS attributes are received from a serving radio network controller.

92. (Currently Amended) The method according to claim 79, wherein the plurality of MAC-d flows are associated to respective radio bearers between the mobile terminal and radio network controller and the method further comprises mapping QoS attributes of the radio bearers to the QoS attributes of the respective associated MAC-d flow.

93. (Previously Presented) The method according to claim 92, wherein the mapping of the QoS attributes comprises taking into account uplink delays on the interface between the base station and the radio network controller.

94. (Canceled).

95. (Currently Amended) The method according to claim 79, wherein the identifier comprised in the scheduling request identifies the highest priority MAC-d flow.

96. (Currently Amended) The method according to claim 95, wherein the highest priority MAC-d flow has the highest QoS demands.

97. (Previously Presented) The method according to claim 79, wherein the QoS attributes comprise at least one of a transfer delay, a guaranteed bit rate, a traffic handling priority, a service type identification, a traffic class and a reordering release timer of the reordering buffer in the Medium Access Control (MAC) entity.

98. (Currently Amended) The method according to claim 79, wherein the scheduling request further comprises a service type indicator indicating that data of one MAC-d flow of said plurality of MAC-d flows to be multiplexed onto the dedicated uplink channel is delay-critical.

99. (Previously Presented) The method according to claim 79, further comprising considering a predetermined gain factor to be additionally applied to the transmission when scheduling the mobile terminal.

100. (Currently Amended) A base station for scheduling a plurality of transmissions of a mobile terminal in the UMTS (Universal Mobile Telecommunications System), said base station comprising:

a communication section adapted to receive from a radio network controller Quality of Service (QoS) attributes of a plurality of MAC-d flows to be multiplexed on a MAC-e flow onto a single enhanced dedicated uplink channel (E-DCH) by a mobile terminal, and further adapted to receive a scheduling request from the mobile terminal, wherein the scheduling request (i) comprises an identifier identifying one MAC-d flow of the plurality of MAC-d flows and (ii) requests allocation of an uplink resource to the mobile terminal for transmitting data of said plurality of MAC-d flows to be multiplexed onto the dedicated uplink channel,

a determining section configured to determine, based on the identifier within the scheduling request received from the mobile terminal and the QoS attributes received from the radio network controller by associating the identifier with the QoS attributes of the plurality of MAC-d flows received from the radio network controller, the QoS attributes associated with the one MAC-d flow identified by the identifier within the scheduling request, and

a scheduling section adapted to schedule the uplink resource for transmission of data of said plurality of MAC-d flows to be multiplexed onto the dedicated uplink channel by said mobile terminal, based on the identifier identifying said one MAC-d flow of said plurality of MAC-d flows and said QoS

attributes of the one MAC-d flow identified by the identifier within the scheduling request as determined by the determining section.

101. (Canceled).

102. (Currently Amended) The base station according to claim 100, wherein each flow of said plurality of MAC-d flows has a priority.

103. (Canceled).

104. (Previously Presented) The base station according to claim 100, wherein the scheduling request further comprises information on a buffer occupancy and on a transmission power at the mobile terminal.

105. (Currently Amended) The base station according to claim 100, wherein the communication section is adapted to transmit a scheduling assignment to the mobile terminal, wherein the scheduling assignment indicates the uplink resource allocated to the mobile terminal for transmission of the data of the plurality of MAC-d flows to be multiplexed onto the dedicated uplink channel.

106. (Canceled).

107. (Currently Amended) The base station according to claim 100, wherein the QoS attributes are included in a configuration message.

108. (Currently Amended) The base station according to claim 100, wherein the QoS attributes are received from a serving radio network controller.

109. (Currently Amended) The base station according to claim 100, wherein the identifier comprised in the scheduling request identifies the highest priority MAC-d flow.

110. (Currently Amended) The base station according to claim 109, wherein the highest priority MAC-d flow has the highest QoS demands.

111. (Previously Presented) The base station according to claim 100, wherein the QoS attributes comprise at least one of a transfer delay, a guaranteed bit rate, a traffic handling priority, a service type identification, a traffic class and a reordering release timer of the reordering buffer in the Medium Access Control (MAC) entity.

112. (Currently Amended) The base station according to claim 100, wherein the scheduling request further comprises a service type indicator indicating that data of one MAC-d flow of said plurality of MAC-d flows to be multiplexed for transmission on the dedicated uplink channel is delay-critical.

113. (Previously Presented) The base station according to claim 100, wherein the scheduling unit is adapted to consider a predetermined gain factor to be additionally applied to the transmission when scheduling the mobile terminal.

114-117. (Cancelled).

118. (Currently Amended) A non-transitory computer readable storage medium for storing instructions that when executed by a processor of a base station in the UMTS (Universal Mobile Telecommunications System) cause the base station to schedule transmissions by a plurality of mobile terminals, by:

receiving at the base station from a radio network controller Quality of Service (QoS) attributes of a plurality of MAC-d flows to be multiplexed on a

MAX-e flow onto a single enhanced dedicated uplink channel (E-DCH) by a mobile terminal,

receiving a scheduling request from the mobile terminal at the base station, wherein the scheduling request (i) comprises an identifier identifying one MAC-d flow of the plurality of MAC-d flows and (ii) requests allocation of an uplink resource to the mobile terminal for transmitting data of the plurality of MAC-d flows to be multiplexed onto the dedicated uplink channel, and

determining at the base station, based on the identifier within the scheduling request received from the mobile terminal and the QoS attributes received from the radio network controller by associating the identifier with the QoS attributes of the plurality of MAC-d flows received from the radio network controller, the QoS attributes associated with the one MAC-d flow identified by the identifier within the scheduling request, and

scheduling by the base station the uplink resource for transmission of data of said plurality of MAC-d flows to be multiplexed onto the dedicated uplink channel by said mobile terminal based on the identifier identifying said one MAC-d flow of said plurality of MAC-d flows and said QoS attributes that are determined by the determining operation and that are associated with the one MAC-d flow identified by the identifier within the scheduling request.

119. (Cancelled)

120. (Currently Amended) The method according to claim 79, wherein the scheduling request requests allocation of an uplink resource to the mobile

terminal for transmitting data of said plurality of MAC-d flows multiplexed to a protocol data unit (PDU) on the dedicated uplink channel.

121. (Previously Presented) The method according to claim 120, wherein the PDU is a MAC-e PDU.

122. (Currently Amended) The base station according to claim 100, wherein the scheduling request requests allocation of an uplink resource to the mobile terminal for transmitting data of said plurality of MAC-d flows multiplexed to a protocol data unit (PDU) on the dedicated uplink channel.

123. (Previously Presented) The base station according to claim 122, wherein the PDU is a MAC-e PDU.

124. (Currently Amended) The method according to claim 113, wherein the scheduling request requests allocation of an uplink resource to the mobile terminal for transmitting data of said plurality of MAC-d flows multiplexed to a protocol data unit (PDU) on the dedicated uplink channel.

125. (Previously Presented) The method according to claim 124, wherein the PDU is a MAC-e PDU.

126. (Cancelled)

127. (Previously Presented) The mobile terminal according to claim 125, wherein the PDU is a MAC-e PDU.

128. (Currently Amended) The non-transitory computer readable storage medium according to claim 118, wherein the scheduling request requests allocation of an uplink resource to the mobile terminal for transmitting data of said plurality of

MAC-d flows multiplexed to a protocol data unit (PDU) on the dedicated u plink channel.

129. (Previously Presented) The non-transitory computer readable storage medium according to claim 128, wherein the PDU is a MAC-e PDU.

Allowable Subject Matter

6. **Claims 79, 81, 83-93,95-100,102,104-105,107-113,118,120-125, and 127-129** are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HABTE MERED whose telephone number is (571)272-6046. The examiner can normally be reached on Monday to Friday 10:30AM to 7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung S. Moe can be reached on 571 272 7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aung S. Moe/
Supervisory Patent Examiner, Art Unit 2474

/Habte Mered/
Examiner, Art Unit 2474